

Appln. No. 10/628,519
Amendment dated June 17 2005
Reply to Office Action of March 31, 2005

Amendments to the Specification:

Please replace the paragraph [0011] with the following rewritten paragraph:

[0011] Thermostats, thermostatic control devices and environmental control systems have been designed, manufactured and placed in use for many years. These devices are primarily designed to sense the temperature inside a site ~~1.04~~ and based on occupant designated setting, activate the heating and/or air conditioning system or systems to maintain a comfort level based on the occupants designated level of comfort. There are two main types of design for these devices: a standard single control device or a dual control system.

Please replace the paragraph [0059] with the following rewritten paragraph:

[0059] In general, the system 1.02 allows at least one customer (or user) located at a customer site (indicated by reference number 1.04) and/or a utility (indicated by reference number 1.06) to manage delivery or usage of the electricity to the customer's site ~~1.06~~ 1.04. The utility 1.06 may include both the generation of the electricity, e.g., via power plants, and/or the transmission of electricity to the customer sites 1.04.

Please replace the paragraph [0073] with the following rewritten paragraph:

[0073] In one aspect of the present invention, utility control system 1.12 and the back-end server 1.22 may be provided by and/or serviced and/or maintained by a third party, i.e., a service provider, ~~1.24~~.

Please replace the paragraph [00179] with the following rewritten paragraph:

[00179] As discussed above, each node 1.10, in its simplest form includes a processor ~~2.20~~ 2.02 and a memory device 2.04 within which control logic resides and runs. This control logic, processor 2.02 and memory 2.04 provide the node 1.10 with the necessary control intelligence to manage its associated load or generation resource as a stand-alone point or in conjunction with a plurality of other nodes 1.10 locations as well as manage communications over the controlled device communications channel 2.12 (for control and load control nodes 1.10B, 1.10C) and over the two way communications channel 2.06.

Please replace the paragraph [00254] with the following rewritten paragraph:

[00254] The second step is to learn the operational run characteristics of the HVAC system as a function of the thermal gain. Since the outside temperature varies continuously during a typical day, the rate of thermal gain and the HVAC run times also vary in accordance with these changes. Figure ~~4E~~ 3E illustrates a typical day showing plot lines for the thermal gain rate and the associated HVAC run time. It should be noted here that the setpoint of the system 3.08 was set at a fixed point for the entire day and the use of humidity sensing and control of humidity levels were not introduced into the illustration so that the graphical plots depict a normal home with a normal HVAC control thermostat. Here again, the illustration depicts that as the outside temperature rises and the differential between the indoor setpoint and the outside temperature increase, the thermal gain causes the HVAC system to cycle more frequently. At some point, in extremely hot weather or more importantly in periods of high humidity, with the setpoint at a low setting, the thermal gain would exceed the HVAC units' ability to recover the indoor air temperature to the setpoint. When this occurs, the HVAC run time plot would plateau at 100% of operation and the indoor air temperature would rise above the

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setpoint, until the outside temperature dropped to a level where the thermal gain did not exceed the HVAC units ability to recover the indoor temperature setting or the indoor humidity level dropped to the point where the occupant began to feel cold and adjusted the setpoint higher, permitting the unit to resume a more normal cyclical pattern.